

What is claimed is:

1. An ionic current detection apparatus for an internal combustion engine capable of detecting an ionic current generated in spark plugs connected with secondary sides of a plurality of ignition coils, respectively, each of which generates a high ignition voltage immediately after firing of an air fuel mixture in a corresponding combustion chamber of the internal combustion engine, wherein said plurality of ignition coils are arranged in such a manner that at least the directions of adjacent ignition coils do not coincide with one another.
2. The ionic current detection apparatus for an internal combustion engine as set forth in claim 1, wherein said plurality of ignition coils are arranged in such a manner that the directions of the central axes of ignition coils among adjacent ignition coils do not coincide with one another.
3. The ionic current detection apparatus for an internal combustion engine as set forth in claim 1, wherein said plurality of ignition coils are fixed by a fixture, which has arrangement positions for said ignition coils predetermined according to the mounting directions thereof, in such a manner that the directions of ignition coils among adjacent ignition coils do not coincide with one another, said ignition coils being installed on the engine through said fixture.